DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018592
Date Inspected: 11-Dec-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 630
OSM Departure Time: 1500
Location: Job Site

CWI Name:	See Below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Orthotropic Box Girders

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the project site and observed the following work performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below:

A). Deck Access Hole
B). Field Splice E7/E8
C). Longitudinal and Transverse Stiffeners at Deck Access Holes
D). Field Splice W6/W7
E). QC Inspection Request

A). Deck Access Hole

The QAI observed the Ultrasonic Testing (UT) of the R1 repairs on the Deck Access Hole (DAH) identified as WN: 4E-PP25-E4-W1,W3 and W4. The testing was performed by the QC technician Patrick Swain utilizing a G. E./Krautkramer USM 35X. The examination of the repairs was conducted utilizing UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 and the applicable contract documents. The QC technician performed the required longitudinal wave technique, utilizing a 25.4mm diameter transducer, to perform the examination for base metal soundness and the shear wave technique for the examination of weld soundness which was performed utilizing a 16mm x 19mm rectangular transducer. At the conclusion of the testing no rejectable indications were noted by the QC technician.

B). Field Splice E7/E8

The QAI observed the Ultrasonic Testing (UT) of the Complete Joint Penetration (CJP) groove welds on the longitudinal stiffeners identified as WN: 7E-8E-A-LS4, LS5 and LS6. The testing was performed by the QC technician John Pagliero utilizing a G.E./Krautkramer USM 35X. The examination of the CJP welds was conducted utilizing UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 and the applicable contract documents. The QC technician performed the required longitudinal wave technique, utilizing a 25.4mm diameter transducer, to perform the examination for base metal soundness and the shear wave technique for the examination of weld soundness which was performed utilizing a 16mm x 19mm rectangular transducer. At the conclusion of the testing stiffeners LS4 and LS6 were rejected and no rejectable indications were noted by the QC technician.

C). Longitudinal and Transverse Stiffeners

The QAI observed the Ultrasonic Testing (UT) on the Complete Joint Penetration (CJP) groove welds identified as WN: 3E-PP23.5-5-E2-LS-E, LS-W, TS and 3E-PP23.5-E5-LS-E, LS-W and TS. The testing was performed by the QC technician Steve McConnell utilizing a G.E./Krautkramer USM 35X. The examination of the six (6) CJP welds was conducted utilizing UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 and the applicable contract documents. The QC technician performed the required longitudinal wave technique, utilizing a 25.4mm diameter transducer, to perform the examination for base metal soundness and the shear wave technique for the examination of weld soundness which was performed utilizing a 16mm x 19mm rectangular transducer. At the conclusion of the testing no rejectable indications were noted by the QC technician.

D). Field Splice W6/W7

The QAI observed the Ultrasonic Testing (UT) of the R1 repairs on the bottom plate field splice identified as WN: 6W-7W-D1 and D2. The testing was performed by the QC technician Jesse Cayabyab utilizing a G.E. /Krautkramer USM 35X. The examination of the repairs was conducted utilizing UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 and the applicable contract documents. The QC technician performed the required longitudinal wave technique, utilizing a 25.4mm diameter transducer, to perform the examination for base metal soundness and the shear wave technique for the examination of weld soundness which was performed utilizing a 16mm x 19mm rectangular transducer. At the conclusion of the testing no rejectable indications were noted by the QC technician.

Later in the shift the QAI observed Mr. Cayabyab performing the ultrasonic testing on the side plate field splice identified as WN: 7W-8W-E2. The testing was not completed during this shift.

E). QC Inspection Request

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, the QAI randomly verified the visual appearance of the Complete Joint Penetration (CJP) welding of the following; WN: 7E-8E-A-LS4, LS5, LS6, WN: 3E-PP23.5-E2-LS-E, LS-W, TS and WN: 3E-PP23.5-E5-LS-E, LS-W and TS. The verification was performed to verify the welds and the visual inspection performed by the QC inspectors, John Pagliero and Steve McConnell, meet the requirements of the contract documents. At the conclusion of the QAI verification it appeared that the welds and the QC inspection complies with the contract documents.

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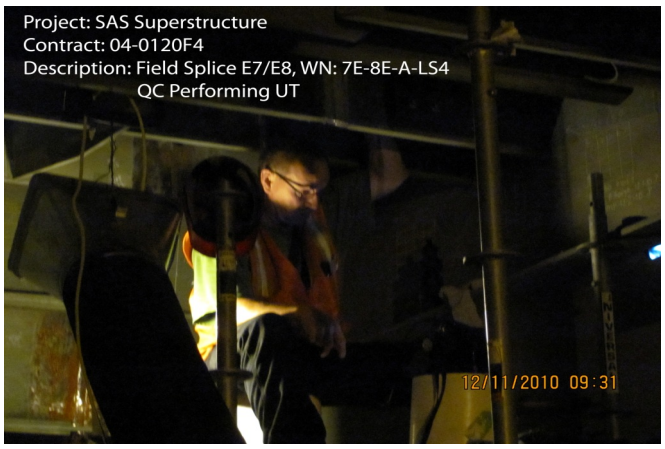
The QAI also performed a Magnetic Particle Test (MPT) verification of the Complete Joint Penetration (CJP) groove weld identified as WN: 3E-PP23.5-E2-LS-E, LS-W, TS and WN: 3E-PP23.5-E5-LS-E, LS-W and TS. A total area of 10% was tested to verify the weld and testing by QC meet the requirements of the contract documents. The examination was performed utilizing a Parker Contour Probe (AC Yoke) an MPT TL-6028, was generated on this date.

The digital photographs below illustrate the work observed during this scheduled shift.



Summary of Conversations:

There were general conversations with Quality Control Inspector Bonifacio Daquinag, Jr. at the start of the shift regarding the location of American Bridge/Fluor welding, inspection and N.D.E. testing personnel scheduled for this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer